(c) During the Financial Year 1998-99, a total capacity of 38MW of surplus power from bagasse based co-generation projects was added.

The average cost of generation of power from bagasse based co-generation projects varies from Rs.1.50 to Rs.2.75/kwh.

Running Street Lights by Solar Energy

710. SHRI RAMACHANDRA KHUNTIA: Will the Minister- of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether it is a fact that some crossings/street lights in the capital are being run by solar energy and are proving to be cost effective; and

(b) if so, what steps have been taken and proposed to be taken to assist Panchayats and its shopping places to install public lights run by solar energy?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) and (b) A Solar Photovoltaic (SPV) operated traffic signal lighting system was installed at the Bhikaji Cama Place crossing in New Delhi in August 1998 as a demonstration project. A few such systems have also been installed in Bangalore and Hyderabad.

The cost effectiveness of solar powered street lights or traffic signals in places where conventional grid-power is available is yet to be established. However, solar street lights are a cost effective option for remote and rural areas, which do not have access to conventional grid power. Under the Ministry's programme, installation of solar street lighting systems is being supported through subsidy for all categories of non-commercial institutions/ organizations, State renewable energy development agencies, panchayats, zilla parishads and DRDAs. During the Ninth Plan period so far, a total of 6,804 solar street lighting systems have been installed in the country. Some commercial organizations have also installed solar lights in their factories, offices and townships.

Setting up Solar Energy Plants in North Eastern Region

711. SHRI ONWARD L. NONGTDU: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether Government are contemplating to set up solar energy plants in the various districts of North Eastern Region;

(b) if so, the details of assistance provided in this regard;

(c) if not, the reasons therefor; and

(d) the steps being taken by Government in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) The Ministry of Non-Conventional Energy Sources is implementing the Solar Photovaltaic Programme (SPV) all over the country, including the North Eastern Region. Under the programme installation/distribution of SPV systems like portable solar lanterns, fixed type home lighting systems, street lighting systems and power plants are being supported. The State-wise achievements for the North-Eastern region, including Sikkim are given in Table I. *(See* below)

(b) The financial assistance provided to the North Eastern States including Sikkim, during the Ninth Plan are given in Table II. *(see* below)

(c) and (d) Do not arise.

Table-I

State-wise Cumulative Achievements in North-Eastern States. including Sikkim Under the MNES SPV Programme (as on 31st January, 2000)

S.N	State	SL(Nos.)	HLS(Nos.)	SLS(Nos.)	PPNo./k.Wp
1	Arunachal Pradesh	4,437	650	738	3/7.9
2.	Assam	475	1,666	98	3/3
3.	Manipur	3,400	50	370	8/10
4.	Meghalaya	3,200	320	593	15/30
5.	Mizoram	2,362	1,595	266	—
6.	Nagaland	—	8	271	1/6
7.	Sikkim	20	160	127	—
8.	Tripura	4,830	1,478	340	9/24.57
	Total	19,024	5,927	2803	39/81.47

SL-Solar lanterns, HLS-Home lighting systems,
SLS, Street Lighting Systems, PP-Power Plants

Table II

State-wise release of Funds to North-Eastern State, including Sikkim under the MNES SPV Programme during the Ninth Plan (as on 31st January, 2000)

S.No	State	Funds released (Rs. in lakhs)
1	Arunachal Pradesh	64.17
2.	Assam	114.89
3.	Manipur	74.08
4.	Meghalaya	33.61
5.	Mizoram	46.67
6.	Nagaland	12.49
7.	Sikkim	10.07
8.	Tripura	158.43
	Total	514.41

Potential of Non-Conventional energy

712. SHRI PREM CHAND GUPTA: Will the Minister of NON-CG-NVENTIONAL ENERGY SOURCES be pleased to state:

(a) whether it is a fact that the total potential of Non-Conventional energy is estimated to be over 100,000 MW whereas the installed capacity is only 1561 MW and the planned increase for the Ninth Plan is only 1000 MW; and

(b) if so, why the potential of this vital clean source .of energy is not being fully exploited?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) Yes, Sir. The broad potential estimated for various Non-Conventional Energy Systems such as wind, biomass, small hydro power, solar energy, urban municipal and industrial wastes, ocean energy, etc., in the country is over 1,00,000 MW. The present installed power generation capacity from Non-conventional Energy Sources is about 1600 Megawatts. A target of about 1700 MW has been fixed during the Ninth Plan.